

**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

|  |  |
| --- | --- |
| **Experiment No** | 4 |
| **Title of Experiment** | Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities |
| **Name of the candidate** | Shaurya Singh Srinet |
| **Team Members** | Shounak Chandra, Parth Galhotra |
| **Register Number** | RA2111032010006, RA2111032010026, RA2111032010029 |
| **Date of Experiment** | 09.02.23 |

**Mark Split Up**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Description** | **Maximum Mark** | **Mark Obtained** |
| 1 | Exercise | 5 |  |
| 2 | Viva | 5 |  |
| **Total** | | **10** |  |

**Staff Signature with date**

**Aim:**

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

**Team Members:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S No** | **Register No** | **Name** | **Role** |
| **1** | **RA2111032010006** | **Shaurya Singh Srinet** | **Rep/Member** |
| **2** | **RA2111032010026** | **Shounak Chandra** | **Member** |
| **3** | **RA2111032010029** | **Parth Galhotra** | **Member** |

**Requirements:**

1. **Project Management Plan:**

|  |  |
| --- | --- |
| **Focus Area** | **Details** |
| Integration Management | Governance Framework, Project Team Structure, Roles &amp; Responsibilities of Team, Change Management, (Change Control, Issue Management), Project Closure |
| Scope Management | Scope Statement, Requirement Management (Gathering, Control, Assumption, Constraint Stakeholder), Define Deliverables, Requirement Change Control, Activities and Sub-Tasks |
| Cost Management | Estimate Effort, Assign Team, Budget Control |
| Quality Management | Quality Assurance: Quality assurance will be managed including governance, roles and responsibilities, tools and techniques and reporting  Quality Control: Specify the mechanisms to be used to measure and control the quality of the work products |
| Resource Management | Estimate and manage the need  People: People & Skills Required  Finance: Budget Required  Physical: Facilities, IT Infrastructure |
| Stakeholder | Identifying, Analyzing, Engaging Stakeholders |
| Risk Management | Identifying, analyzing, and prioritizing project risks |

1. **Estimation:**
   1. **Effort and Cost Estimation:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity Description** | **Sub-Task** | **Sub-Task Description** | **Effort (in hrs)** | **Cost in INR** |
| Web Application  Development | E1R1A1T1 | To create desktop level  Web Application using Python, Flask and SQL | 6-8 | SQL dev-100K Frontend-43K  Backend-100K |
| Research and  Development | E2R2A2T2 | Evaluation of software  technology trends and  incorporating them with updates and patches | 4 | For Research - 20K  For rolling out patches/updates – 50K |
| Data Analytics | E3R3A3T3 | Administrator of Data, Database Management, Evaluating trends in data | 10 with shifts | Data Analyst-100K  Data Scientist-90K  Database Manager 56K |
| Help & Support | E4R4A4T4 | Customer care | 24 with shifts | Customer  Care-70K to 80K |
| Licensing/  Trademarks/  Copyrighting | E5R5A5T5 | Database, IDE, Server,  Terms, Trademarking,  Copyrighting | All time | 25K (one time) |
| Marketing | E6R6A6T6 | Advertisements, Public Relations | 8-10  On requirement | Manager– 68K  Coordinator–50K  Assistant–25K |
| Testers | E7R7A7T7 | To test the functionality of the software in expected and unexpected conditions | 4 | 240K (one time) |

* 1. **Infrastructure/Resource Cost [CapEx]:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Infrastructure Requirement** | **Qty** | **Cost per qty** | **Cost per item** |
| Laptops | 3 | 60,000 | 1,80,000 |
| Telephones | 15 | 1,500 | 22,500 |
| PCs | 15 | 80,000 | 12,00,000 |
| Printers | 2 | 5,000 | 10,000 |
| Office Rooms (Rent) | 5 | 25,000 per month | 1,25,000 |

**2.3. Maintenance and Support Cost [OpEx]:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Details** | **Qty** | **Cost per qty per annum** | **Cost per item** |
| People | Network, DB  Admin, Customer support,  Developers | 4 | 10,00,000 | 40,00,000 |
| License | Database, server, Middleware, Government License | 3 | 10,000 | 30,000 |
| Infrastructures | Server Storage and Network | 1 | 10,000 | 20,000 |

1. **Project Team Formation:**
   1. **Identification Team Members:**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibilities** |
| Shaurya Srinet | Project Lead | Design end-to-end architecture, provide training and support, team management, monitoring and  controlling |
| Parth Galhotra | UX Designer | Design overall visual user experience |
| Parth Galhotra | Frontend Developer | Develop user interface |
| Shounak Chandra | Backend Developer | Coding and Debugging, UI testing to optimize  performance, maintaining database |
| Shaurya Srinet | Quality Assurance Lead | Come up with questionnaires and surveys, random quality checks |
| Shounak Chandra | Tester | Perform testing for various test cases, identifying flaws |

* 1. **Responsibility Assignment Matrix:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RACI Matrix** | **Team Members** | | | |
| **Activity** | **Name (BA)** | **Name (Developer)** | **Name (Project Manager)** | **Key Business User** |
| User Requirement Documentation | A | C | I | R |
| Web Application Development | I | R | A | C |
| Data Analytics | C | R | A | I |
| Research and Development | I | R | A | C |
| Testing | I | R | A | C |
| Marketing | C | I | A | R |

|  |  |
| --- | --- |
| A | Accountable |
| R | Responsible |
| C | Consult |
| I | Inform |

**Result:**

Thus, the Project Plan was documented successfully.